the species or subspecies. The appended list of Kamerun birds numbers 660 species, with the localities where each is known to occur.

The third paper[1] relates to the avifauna of the lake region of Central Africa, including the region from Lake Victoria Nyanza west to the chain of lakes stretching from Lake Albert to Lake Tanganyika (about latitude 3° N. to latitude 7° S.). The list numbers 750 species, of which about 130 are West African forms, while 100 are typically East African. About the same number are of general Ethiopian distribution, 20 are typical northern forms, 50 are Eurasiatic migrants or wanderers, while about 200 are peculiar to the region, which is a subprovince of the West African forest region.

The annotations record not only the specimens collected during the expedition, but the general distribution of the forms is stated, with frequent comment on the relationships of some of the less known forms to their nearest allies. The introduction contains a bibliography of papers relating to the region published since 1905, and these and Reichenow's 'Vögel Afrikas' are cited in the text. The two colored plates that accompany this important paper illustrate five of the author's recently described species.— J. A. A.

Mathews's 'The Birds of Australia.'— Part 4[2] of this admirable work bears date "August 9th, 1911," and includes pages 185–234 and plates xlvi–lviii, and treats of Rails and Gallinules (Nos. 50–63). In addition to the usual descriptions and life histories of the species and subspecies, several new forms are here for the first time described, including a new subspecies of *Rallus pectoralis* from West Australia, a new subspecies of *Eulabeornis tricolor* from North Queensland, and seven new subspecies of *E. philippensis*, none of which latter, however, are from Australia. A revision of the *E. philippensis* group is made, of which twelve subspecies are diagnosed. The changes in nomenclature include the introduction for the first time of trinomials for several of the Australian forms of *Porzana*. The excellent plates, all drawn by Keulemans, were evidently printed before the author's recent adoption of his revised nomenclature. The life histories include much hitherto unpublished material, contributed to the author by valued correspondents. The species of Rails for the most part being well-known, the biographical matter is satisfactorily full. In Part 3,

[1] Die Vogelfauna des Mittelafrikanischen Seengebietes. Auf Grund der Sammlungen Seiner Hoheit Herzogs Adolf Friedrich zu Mecklenburg. By Prof. Dr. Ant. Reichenow. Wissensch. Ergebn. der Centralafrika-Exped. 1907–08 unter Führung des Herzogs Adolf Friedrich zu Mecklenburg, pp. 231–374, pll. vii and viii, colored.

[2] The Birds of Australia. By Gregory M. Mathews, Member of the Australian Ornithologists' Union and the British Ornithologists' Union. With hand-coloured Plates. Volume I, Part 4, pp. 185–234, pll. xlvi-lviii, plus reissue of pp. 183 and 184, here cancelled. August 9th, 1911.

For notices of previous Parts see *antea*, pp. 135, 289, 376.

dealing with the Pigeons, the scarcity of biographical detail, to which attention was called in our notice of this part, we find was due to the fact that almost nothing is yet known of the life histories of the species thus seemingly neglected. The present Part indicates that the work is to be emphatically revisionary as regards questions of nomenclature and the status of forms belonging to the Australian Avifauna.— J. A. A.

Pearl on the Relative Conspicuousness of Barred and Self-Colored Fowls.[1]— In this paper are presented statistics of the fowls killed by natural enemies at the Maine Agricultural Experiment Station in 1909. The fowls were Barred Plymouth Rocks, Cornish Indian Games and crosses of these forms. Both the games and crosses were practically self or unicolored birds. The author comments on a note by Davenport [2] to the effect that of 24 chicks killed by crows in one afternoon at Cold Spring Harbor, Long Island, all but one were unicolored. Davenport's conclusion on the acknowledged fragmentary data was that the self-colors of poultry tend to be eliminated by the natural enemies and that pencilled birds are relatively immune from attack because relatively inconspicuous. Doctor Pearl agrees with the final phrase of this conclusion and presents four reproductions of photographs which strikingly illustrate the greater conspicuousness of the unicolored birds, at least under ordinary circumstances.

Davenport's conclusion will comfort those who believe in the protective value of color patterns which render animals inconspicuous to the human eye, but it is based on a single observation which for many reasons may have been misleading. Doctor Pearl however gives the proportions of barred and unicolored fowls among a total of 325, captured in one year by natural enemies from a flock of 3,343 at the Maine Agricultural Experiment Station. The natural enemies were rats, skunks, foxes, crows, hawks, and cats. Of the total number of birds 10.05 per cent were self-colored. Of all the eliminated birds 10.77 per cent were self-colored.

Of the self-colored birds 1.79 per cent were eliminated by recorded enemies (chiefly rats). Of the barred birds 2.26 per cent were eliminated by recorded enemies.

Of the self-colored birds 8.63 per cent were eliminated by unrecorded enemies (chiefly predaceous birds).

Of the barred birds 7.38 per cent were eliminated by unrecorded enemies. In other words, barred and self-colored chickens were captured by natural enemies about in proportion to their total numbers in the flock.

The author concludes that for the time and place under consideration, the relative inconspicuousness of the barred color pattern afforded its possessors no great or striking protection against elimination by natural enemies.

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[1] Am Nat., XLV, No. 50, Feb., 1911, pp. 107–117.
[2] Nature, Vol. 78, 1908, p. 101.